

# Technology Opportunity

## Novel Thrust Roller Bearing System

The National Aeronautics and Space Administration (NASA) is interested in identifying commercial partners to license and further develop an innovative new bearing system. Developed by Goddard Space Flight Center, this technology is a simple retrofit adapter that permits off-the-shelf roller bearings to handle thrust loads.

### Benefits

- Significant bearing performance improvement, especially axial-thrust capability
- Simple and low-cost
- Easy retrofit to existing bearings



### Commercial Application(s)

Goddard's thrust roller bearing system could be used anywhere a conventional roller bearing is used. Examples include:

- Motors
- Pumps
- Automotive and Manufacturing Equipment

### The Technology

This new technology uses a set of thrust lips and a low-cost carrier to allow off-the-shelf roller bearings to handle thrust loads. The thrust lips are retrofit to the races of any existing commercial roller bearing. The roller bearings are unchanged and the low-cost carrier is simply snapped into place. The result is a modified off-the-shelf roller bearing system with the capability to handle light to moderate thrust loads.

### Commercial Opportunity

The thrust roller bearing system is part of NASA's technology commercialization program. This program seeks to stimulate commercial use of NASA-developed technologies. Prototypes of this system have been built and a patent application has been filed. Commercial companies are invited to partner with Goddard to bring this innovative bearing system to the commercial marketplace.

### For More Information

If you are interested in more information or would like to pursue partnership opportunities with NASA Goddard, please contact:

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